Energy storage product patent application process

To make the patent database for the analysis, first, a comprehensive survey on green hydrogen projects worldwide was conducted and hydrogen-related technologies were ...

The transformation of energy occurs in tandem with the growth of human civilization. It is a strategic choice made by countries all over the world to support energy ...

There is described an energy storage system (300, 310) for storing energy in connection with a renewable energy generating facility (100). The energy storage system (300, ...

Abstract: An energy management system interoperates with an automation system to provide integrated control over essentially all power-consuming, power-generating, ...

To ensure grid reliability, energy storage system (ESS) integration with the grid is essential. Due to continuous variations in electricity consumption, a peak-to-valley fluctuation ...

an energy storage device product comprises a ... FIG. 1 illustrates selected steps of a process of manufacturing an electrode of a double ... solvent and additive free active electrode films are ...

Solid-state battery technology represents a significant shift in energy storage solutions, offering enhanced safety, efficiency, and longevity compared to traditional lithium ...

Once you have identified the patentable aspects of your invention, the next step is to prepare a patent application. This involves drafting a detailed description of the invention, ...

To date, various energy storage technologies have been developed, including pumped storage hydropower, compressed air, flywheels, batteries, fuel cells, electrochemical ...

EPO"s first joint study with the International Energy Agency underlines the key role that battery innovation is playing in the clean energy transition.

Honeywell"s Energy Storage Solutions provide technology, software, and services to help optimize operations, reduce carbon footprint, and deliver significant cost savings to ...

The importance of batteries has been growing as a solution in a very dynamic puzzle. As a set of technologies at the intersection of the clean-digital transition, their role is ...

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The patents overwhelmingly represent improvements in the efficiency of energy systems and manufacturing processes to make technology easier to scale and cheaper to use. ...

A method of energy storage comprises receiving input energy (1) and using the input energy to compress (2) air or other process gas to produce a compressed process gas. ... 2021-09-23 ...

U.S. patent application number 17/100700 was filed with the patent office on 2021-05-27 for ... In certain applications, energy storage systems may also be configured or manufactured to provide additional non-cell performance ...

The goal of developing next-generation battery technology is to improve safety and reliability and maximize energy density [2]. ... [18], the paper adopts the modified approach by ...

An overview of total patent applications for pyrolysis + gasification per country is given in Fig. 15 a, whilst Fig. 15 b provides an overview of the types of patents for the years ...

A method and system for producing a dynamic digital twin includes a plurality of energy-harvesting sensors that are interrogated by a reader device to acquire real time data of a ...

To support the much-needed progress, understanding innovation in electrochemical energy storage revealed in patents is an important research, as well as public policy, issue for ...

Fig. 1 b the process of unloading is shown. Fresh air is compressed and further heated in the heat storage 12. ... Pumped heat energy storage system with generation cycle thermal integration ...

On April 9, CATL unveiled TENER, the world"s first mass-producible energy storage system with zero degradation in the first five years of use. Featuring all-round safety, five-year zero degradation and a robust 6.25 MWh capacity, ...

Haibo Sichuang plus-sized research layout of energy storage converter technology. On August 20, Haibo sichuang"s patent application for "an energy storage ...

The range of sources of renewable energy requires a leap forward when it comes to innovation in energy storage and other enabling technologies that will help achieve the energy transition, including by balancing supply of ...

The energy storage-ICT patent applications were concentrated mainly in eight provinces in China, with Guangdong province having the most patent applications at 5,420, ...

FLASC was developed during Buhagiar"s PhD in offshore wind, hydraulic transmission and energy storage at

the University of Malta. The university recognised the ...

In general, electrochemical energy storage has a short service life, relatively high LCOE, may cause environmental pollution, and have safety risks; in addition, some study ...

An energy storage system of the present disclosure includes: a first battery module in which a plurality of battery cells are disposed; a second battery module in which a plurality of battery ...

The rheological properties of the PAN-based gels G and H were examined by a linear oscillatory rheological test. The storage modulus, E?, the loss modulus, E?, and the ratio ...

An energy storage system comprises a weighted object 5 suspended from a cable(s) 7, a lifting device 8 driving the cable 7 to move the weighted object 5 through a substantially vertical ...

The transfer of energy storage patents can facilitate innovative development. The present study analyzes the factors influencing the transfer of cooperative energy storage ...

Writing a Clear and Comprehensive Patent Application The crux of a strong patent application lies in its clarity and comprehensiveness. For electronics innovations in energy ...

Three distinct form factors are most typically used in large-scale product applications: pouch cells, prismatic cells, and cylindrical cells. ... cell may be chemically and thermally compatible with ...

Web: https://eastcoastpower.co.za

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